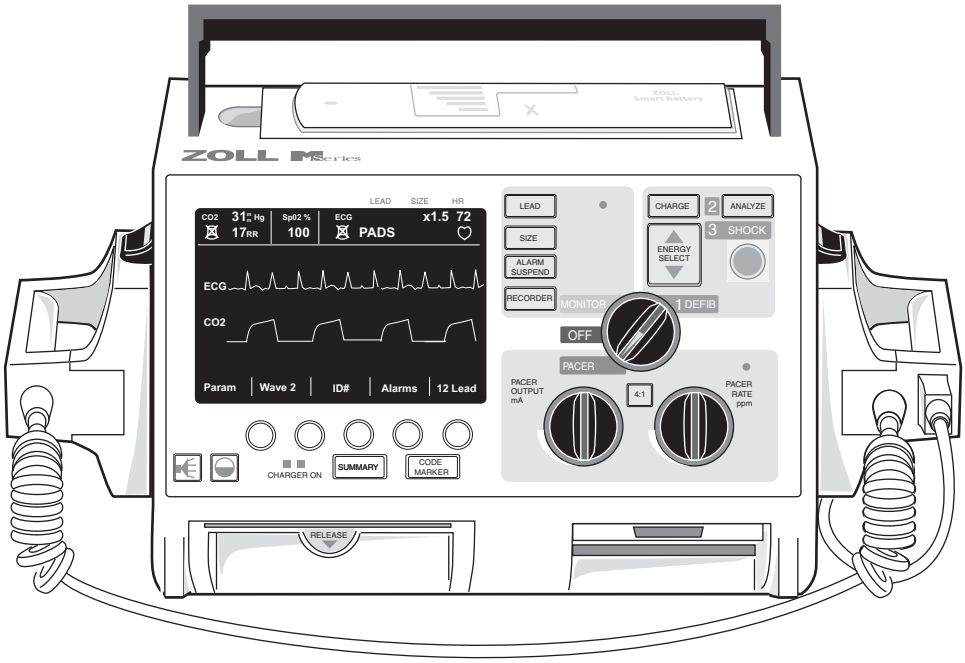
ZOLL®

MSeries®

CONFIGURATION GUIDE



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Introduction

The M Series is designed with several user selectable features that allow operators to configure the device according to their protocols and local requirements. This manual describes the configuration options and how to change them. This manual also lists the configurable features, options and default settings. Some features are available to manual mode operators only.

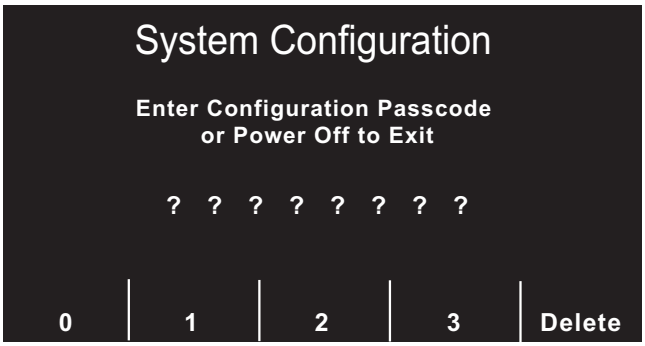
The default settings shown below are for North American units only. To print the current configuration of your unit, while the unit is in the configuration mode, press the Print Config softkey.

CAUTION

The following features are not currently implement on the M Series products: Voice Markers and Auto Self-Test. Refer to the "Configuration Option Tables" section for specific features that are not currently implemented.

Configuring the Unit

After the unit has been off for 10 seconds or more, simultaneously press and hold the rightmost and leftmost softkeys. Turn the selector switch to **MONITOR** or **ON** while holding the buttons depressed for approximately four (4) seconds. After four (4) seconds the following screen will appear.

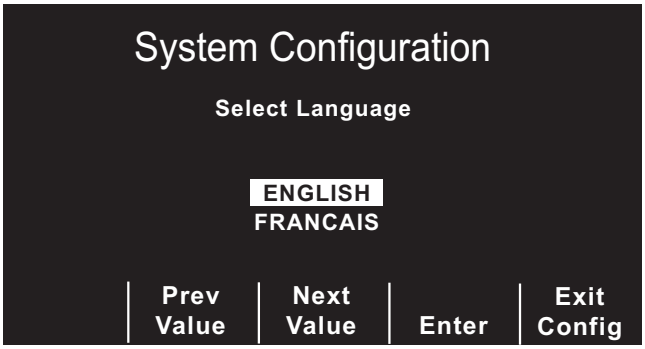


Users entering System Configuration for the first time must enter the default pass code (00000000) for System Configuration to continue.

Press the **0** (zero) softkey. This will move the highlight to the next digit. Repeatedly press the **0** (zero) softkey until all eight digits have been entered. The Configuration Pass code screen will then automatically advance to the Select Language menu.

To change one of the entered digits use the **Delete** softkey to highlight the incorrect digit and reenter the correct code.

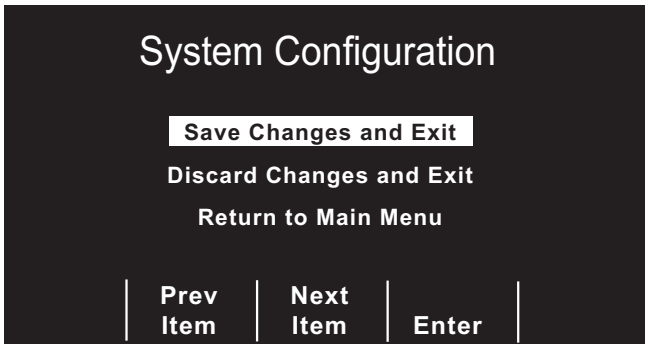
Select Language



The first configurable option displayed after entering the correct pass code, is the Select Language menu. Press the **Prev Value** and **Next Value** softkeys to move the highlight from one language to the other.

Note: Some M Series units include software that allows the device to operate in either of two languages. If the languages displayed do not meet your needs contact ZOLL Technical Service for a language upgrade.

Press the **Enter** softkey to select the highlighted language and move to the Main Configuration menu. All subsequent configuration menus will be in the selected language. Press the **Exit Config** softkey to display the following three choices:



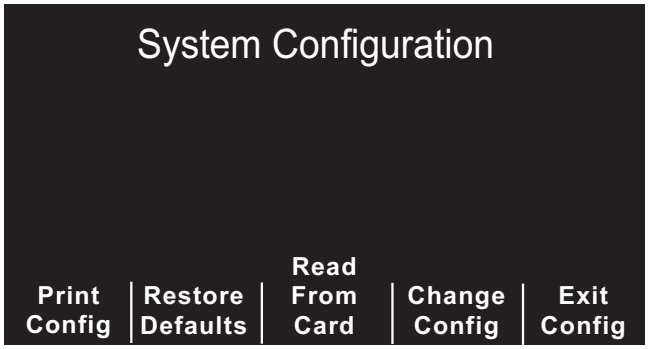
Press the **Prev Item** or **Next Item** softkey to scroll the highlight to the desired function. Press the **Enter** softkey to activate the selected function.

If the Return to Main Menu is selected, the unit will then display the Select Language menu described in the previous section.

Caution: Print out the summary report before changing languages. If a summary report containing Code Marker events is printed after changing languages, the Code Marker events will not match.

Main Configuration Menu

The Main Configuration menu is displayed whenever the **Enter** softkey is depressed from the Language Select menu or the **Main Menu** softkey is depressed while displaying other system configuration screens.



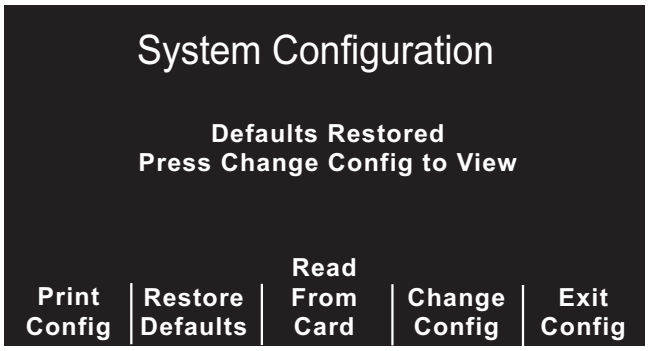
This menu provides the following five (5) softkey options: Print Config, Restore Defaults, Read From Card, Change Config, and Exit Config.

Print Config

Pressing the **Print Config** softkey will cause the unit to print, via the strip chart recorder, the current unit configuration settings.

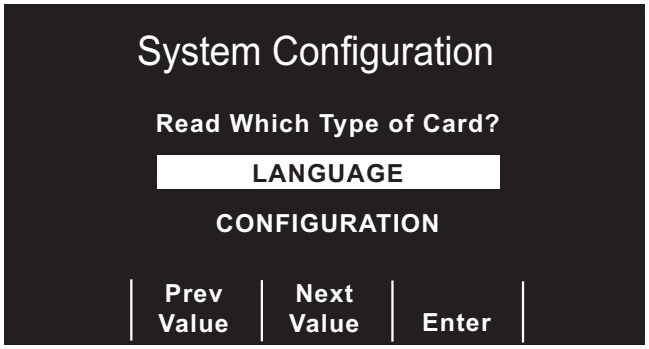
Restore Defaults

Pressing the **Restore Defaults** softkey causes the unit to reconfigure it to its default settings. (See the Configuration Options Table section). The display language is the only setting, which if different from the default, will not change. Once the default settings have been restored the **"**Defaults Restored" and "Press Change Config to View" messages will be displayed.



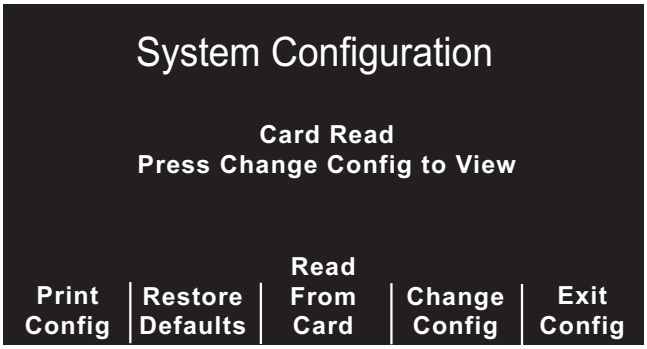
Read From Card

Pressing the **Read From Card** softkey prompts the user to choose either a language or configuration card. The following screen will be displayed.



To move the highlighted area from LANGUAGE to CONFIGURATION and vice versa, press the **Prev Item** and **Next Item** softkeys. Press the **Enter** softkey to begin reading and storing the language settings or configuration settings from the user installed memory card.

If a language card has been read and loaded, the “Card Read” message displays. If a configuration card has been read and loaded, the “Card Read” and “Press Change Config to View” messages display (see below):



If there is an error reading the memory card, one of the following error messages will be displayed on the monitor.

EROR MESSAGE	DEFINITION
CARD READ FAILED	No response from card reader
BAD CARD	Cannot read from card
WRONG CARD TYPE	Card is the wrong type
CONFIG DATA NOT COMPATIBLE	Internal software is unable to read card data
NO CARD INSERTED	Card is not installed in PCMCIA slot
CARD EMPTY	No data on card

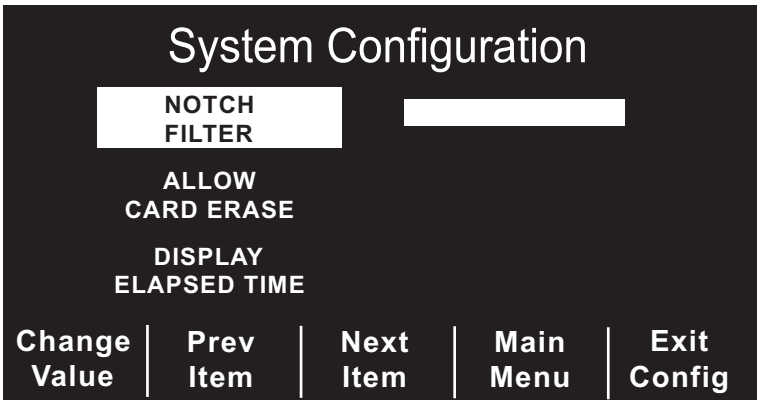
Change Config

Pressing the **Change Config** softkey causes the unit to display the first configuration option menu.

There are three user configurable features contained within each option menu. (Refer to the “Configuration Option Tables” section for all available options and default settings).

Configuration Settings

A description of each configurable feature is displayed in the left column of the option menu and that feature's current setting is shown in the right column.



Pressing the **Change Value** softkey allows you to sequence through the available settings for the highlighted feature. When the desired setting is displayed, pressing the **Next Item** softkey will enter the selection and move the highlight to the next feature. Pressing the **Prev Item** softkey will enter the selected setting and move the highlight to the previously selected feature. Pressing the **Main Menu** softkey will cause the unit to return to the Main Configuration menu (See Main Configuration Menu Section). Pressing the **Exit Config** softkey will cause the unit to display the "Save Changes and Exit" screen.

NEXT MENU is displayed on the screen when other option menus are available. Press the **Next Item** softkey until the new menu is displayed.

PREV MENU is displayed on the screen when other previously displayed option menus are available. Press the **Prev Item** softkey until the previous menu is displayed.

Notch Filter

Sets the ECG Notch Filter frequency for proper AC mains interference rejection.

Allow Card Erase

Allows the user to erase PCMCIA data cards on the M Series unit when set to "Yes".

Display Elapsed Time

Allows the user to display the elapsed time since the unit was turned on, when enabled. The elapsed time will continue to be counted for up to 10 seconds after power down. This will give the operator adequate time to change the battery without resetting the elapsed timer.

Elapsed time will be reset to zero (0:00) whenever the unit has been off for more than 10 seconds.

Voice Markers Enabled

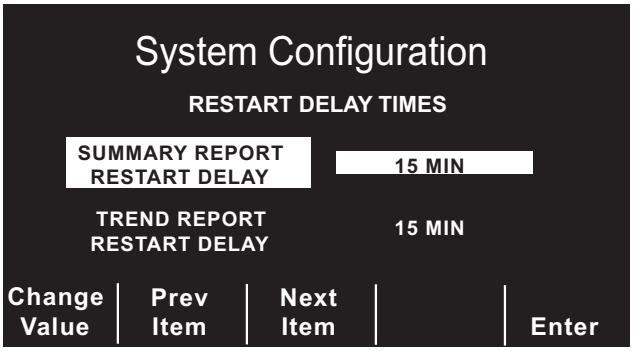
When voice markers are enabled, the unit will record five seconds of audio data in internal memory immediately following each depression of the **CODE MARKER** button. This audio recording along with a time stamp can be played back when the **SUMMARY** button is pressed.

Note: This option is not yet implemented.

Set Report Restart Delays

Allows review of, or changes to the length of time the device must be turned off before it erases all data stored in either summary report memory or trend memory.

With Set Report Restart Delays highlighted and Set/Review selected, press the **Change Value** softkey. The following screen displays:



Pressing the **Change Value** softkey will scroll the highlight through the available delay times.

Pressing the **Prev Item** and **Next Item** softkeys will scroll the highlight to the next or previous restart delay feature.

Pressing the **Enter** softkey will cause the unit to return to the main configuration menu.

Print 12 Lead 4x3

Determines how many copies of a 12-lead 4x3 report will print after pressing and holding the **RECORDER** button for three seconds. When set to “1 Copy” or “2 Copies” one or two copies of the 12-lead 4x3 report will print. When set to “None”, pressing and holding the **RECORDER** button will cause a one or three lead DIAG BANDWIDTH ECG strip to be printed.

Auto Self-Test Timeout Period

Allows the user to set the time between tests or disable the automatic tests. The unit is capable of automatically running a self-test at seven to thirty day intervals. If the unit is off, plugged in, and the test connector is attached to the Multi-Function cable, the unit will test the battery status, charge and discharge the defibrillator, measure the amplitude and timing of the pacing waveform, and measure the impedance of the test port.

Note: This option is not yet implemented.

Async Softkey in Pace Mode

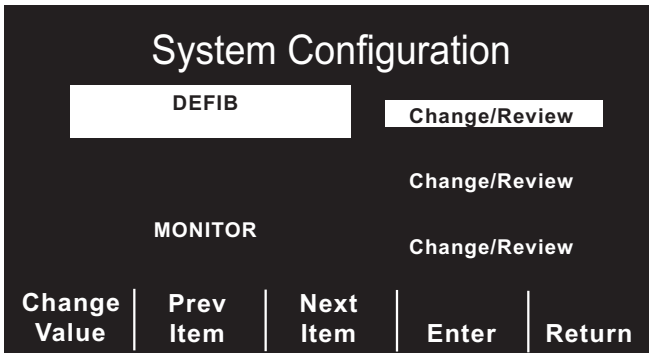
Sets the unit to display the Async Pacing On/Off softkey when the unit is in pace mode.

Code Markers

Allows review of or changes to the preconfigured list of Code Markers available for use in PACER, MONITOR, and DEFIB modes.

Note: MONITOR Code Markers are not used in AED Models.

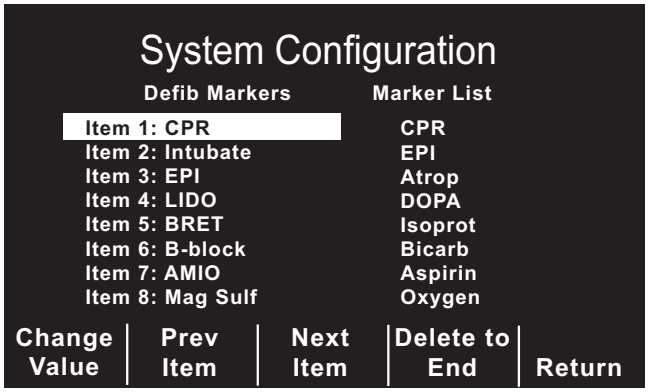
With Code Markers highlighted and Config/Review selected, press the **Change Value** softkey. The following screen displays:



Pressing the **Change Value** softkey will change the highlighted setting from Change/Review to Set to Defaults and vice versa.

Pressing the **Prev Item** and **Next Item** softkeys will scroll the highlight to the next or previously highlighted code markers feature.

Pressing the **Enter** softkey when the Change/Review option is highlighted for one of the code markers features causes the following screen to be displayed (this example shows the Defib Code Markers screen).



Pressing the **Change Value** softkey will highlight the first clinical action in the Marker List column and change the softkeys so that a new clinical action may be entered (shown below).

Pressing the **Prev Marker** and **Next Marker** softkeys scroll the highlight through the entire Marker List. Press the **Enter Marker** softkey to replace the highlighted item in the Defib markers column with the highlighted clinical action in the Marker List.

Pressing the **Prev Item** or **Next Item** softkeys will scroll the highlight to a different item number in the Defib Markers column.

Pressing the **Delete to End** softkey will delete all configured Defib markers from the highlighted item number to the end of the list. The user can then enter new clinical actions for each item.

Pressing the **Return** softkey will return the unit to the Change/Review Code Markers display where the user can choose Defib, Monitor or Pace Code Markers.

Pressing the **Return** softkey again causes the unit to return to the previous menu.

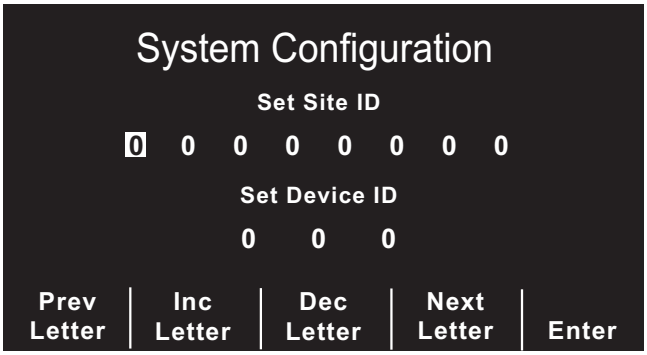
Device Identifier

Sets an eleven-digit device identifier code. This code is divided into two sub codes (Site ID, eight alphanumeric characters, and Device ID, three alphanumeric characters). The device identifier is printed on the 12-lead strip chart, summary report, fax and Catalyst™ MUSE® printouts.

Catalyst MUSE is a registered trademark of GE Medical Systems.

Note: If you are transmitting 12-lead ECG data to a Catalyst MUSE system, it is recommended that you set up the device identifier.

Pressing the **Change Value** softkey causes the following screen to display:



Pressing the **Prev Letter** softkey moves the highlight left to the previous entered digit.

Pressing the **Inc Letter** or **Dec Letter** softkeys increments or decrements the selected digit.

Pressing the **Next Letter** softkey moves the highlight right to the next digit to be entered.

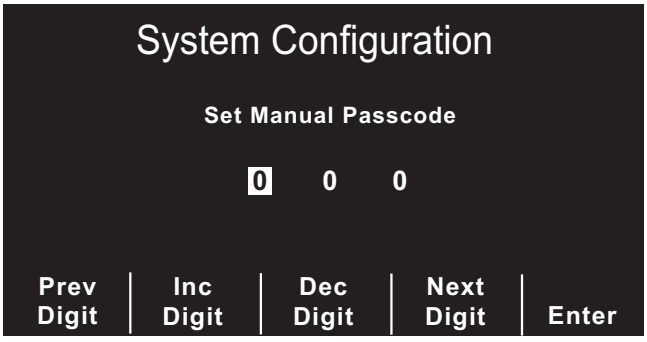
Pressing the **Enter** softkey selects the values that have been entered and returns to main configuration menu.

Manual Mode Passcode (Advanced AED Models)

Allows the three-digit Manual Mode Passcode to be set or changed. Each digit entered can only be set between 0 (zero) and 3 (three) inclusive.

Entering “000” as the pass code disables password protection of the Manual Mode. When “000” is selected, no password is required to enter the Manual Defibrillation Mode.

Pressing the **Change Value** softkey causes the following screen to display:



Pressing the **Prev Digit** softkey moves the highlight left to the previous entered digit.

Pressing the **Inc Digit** or **Dec Digit** softkeys increments or decrements the selected digit.

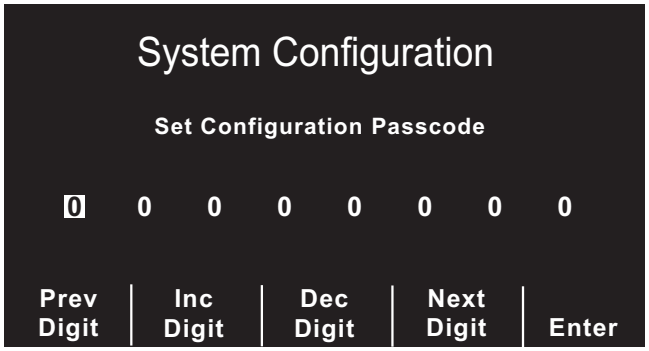
Pressing the **Next Digit** softkey moves the highlight right to the next digit to be entered.

Pressing the **Enter** softkey selects the values that have been entered and returns to main configuration menu.

Configuration Mode Passcode

Sets an eight digit Configuration Passcode. Each digit entered can only be set between 0 (zero) and 3 (three) inclusive.

Pressing the **Change Value** softkey causes the following screen to display:



Pressing the **Prev Digit** softkey moves the highlight left to the previous entered digit.

Pressing the **Inc Digit** or **Dec Digit** softkeys increments or decrements the selected digit.

Pressing the **Next Digit** softkey moves the highlight right to the next digit to be entered.

Pressing the **Enter** softkey selects the values that have been entered and returns to main configuration menu.

Energy Level: Shock 1, 2, 3

Selects the energy levels used for the 1st, 2nd, and 3rd consecutive shocks that the defibrillator delivers when:

- In semi-automatic or advisory mode and using pads
- In manual mode, using external paddles or pads, with Basic Auto Energy Escalation set to "Yes"

Energy level 1 is the energy level the unit defaults to when the power is turned on with external paddles or pads connected. For more information about the Basic Auto Energy Escalation setting, see the "Basic Auto Energy Escalation" section of this manual.

Auto Analyze

This parameter allows you to specify whether the unit automatically repeats ECG rhythm analyses after the delivery of shocks in the AED and Advisory modes and works in conjunction with the Stacked Shocks parameter described next. Enabling this parameter also enables the occurrence of post-shock CPR intervals. When set to No, which is the Manual mode default, the unit does not perform foreground analysis automatically (with the exception of the first analysis on power-up in Auto-Defib mode, if the unit is configured to analyze on power-up.)

When set to Yes, and the Stacked Shocks option is set to 3, the unit automatically analyzes the patient's ECG rhythm after the first and second shocks in each three-shock sequence. Following delivery of the final shock, the unit stops automatic re-analysis and either displays a "CHECK PULSE" prompt, or immediately begins a CPR interval, depending on additional parameter settings. This function operates only when the Auto Charge in Advisory Mode is set to Yes.

When set to Semi-Auto Only, the unit functions as described above only when it is in AED Semi-Auto mode. If the unit is changed to Manual mode From AED Semi-Auto mode, the unit terminates any automatic analysis/re-analysis sequencing. If the **Analyze** button is pressed, the unit analyzes only once.

Stacked Shocks

This parameter specifies the number of stacked shocks that must be administered prior to the activation of a CPR interval and works in conjunction with the Auto Analyze parameter.

Display DO CPR Message

This parameter allows you to specify whether the unit displays the configured CPR prompt (described below) for the configured CPR time interval after each set of stacked shocks. The unit behaves differently depending on this particular parameter value.

- When set to No (the Manual mode default), the unit behaves as follows:
  - At the end of any analysis with an outcome of no shock advised, the unit displays the "NO SHOCK ADVISED" message. The unit then remains idle for the configured CPR interval duration. After the CPR interval, if the **Analyze** button has not been pressed, the "PRESS ANALYZE" message is displayed and remains until a new analysis is started or the mode is changed.
  - At the end of a stacked shock sequence (assuming the final shock is delivered) and when the optional 10 second "CHECK PULSE" message disappears, the CPR interval begins. The unit remains idle for the duration of the CPR interval. After the CPR interval, if the **Analyze** button has not been pressed, the "PRESS ANALYZE" prompt is displayed and remains until a new analysis is started or the mode is changed.
  - If the defibrillator disarms itself after it was charged (because the Defib Ready time elapsed before a shock was delivered), the unit displays the "PRESS ANALYZE" prompt until the **Analyze** button is pressed.
- When set to Yes, the unit behaves as follows:
  - At the end of any analysis with an outcome of no shock advised, the unit displays the "NO SHOCK ADVISED" message for 10 seconds, after which the message is cleared and the configured CPR prompt is displayed for the duration of the CPR interval. After the CPR interval, the "PRESS ANALYZE" prompt is displayed until a new analysis is started or a mode change occurs. You can start a new analysis during the CPR interval by pressing the **Analyze** button.
  - At the end of a stacked shock sequence (assuming the final shock is delivered) and when the optional 10 second "CHECK PULSE" message disappears, the CPR interval begins. The configured CPR prompt is displayed for the duration of the CPR interval. After the CPR interval, the CPR prompt is cleared and a new analysis starts automatically.
  - If the defibrillator disarms itself after it was charged (because the Defib Ready time elapsed before a shock was delivered), the unit displays the "PRESS ANALYZE" prompt until the **Analyze** button is pressed.

The Display DO CPR Message feature is operational only when the Auto Charge in Advisory Mode and the Auto Analyze options are both set to Yes.

Note: When set to "Only in Semi-Auto," the unit functions as described above only when it is in AED semi-auto mode.

CPR Message After Shock

This parameter determines which CPR message/voice prompt, "IF NO PULSE, PERFORM CPR," or "PERFORM CPR," is issued during the CPR interval after the delivery of the final shock in a stacked sequence. The selected message is displayed through the entire CPR interval.

CPR Message After No Shock Advised

This parameter determines which CPR message/voice prompt, "IF NO PULSE, PERFORM CPR," or "PERFORM CPR," is issued during the CPR interval after a No Shock Advised analysis result. The selected message is displayed through the entire CPR interval.

Check Pulse

This parameter works in conjunction with the Auto Analyze parameter to give you the capability to specify whether the unit displays the prompt "CHECK PULSE" for 10 seconds immediately after delivery of the final shock in a stacked shock sequence, after each No Shock Advised analysis result, or both. During this 10-second time interval, The "CHECK PATIENT" and "PRESS ANALYZE" prompts are suppressed on M Series units in semi-auto mode,

although background analysis is active. After “CHECK PULSE” clears, the CPR interval begins.

Restart Analysis After CPR

When this parameter is set to Yes (default), the analysis starts automatically after the CPR interval following each shock. Analyses do not automatically restart after a CPR interval following No Shock Advised results. When this parameter is set to No, the PRESS ANALYZE message is displayed, but the analysis does not restart.

Duration of CPR Interval

This parameter allows you to specify the duration of the CPR interval (1, 1.5, 2, 2.5, 3, 3.5, or 4 minutes) as described in the Display DO CPR Message parameter.

Record CPR Compression Data

When this parameter is set to “Yes”, CPR data is recorded to the PCMCIA card whenever the CPR-D•*padz* are in use. This parameter can be set to Yes only if ECG Waveform to Card in Advisory Mode is set to Yes.

CPR Compression Metronome

This parameter allows you to select in which modes you want the CPR metronome enabled. If set to Yes and the unit is in Manual Mode, the metronome is activated when compressions fall to below 80 compressions per minute during CPR. If set to Semi-Auto Only or Yes and the unit is in Semi-Auto Mode, the metronome is always on during CPR periods. If set to No, the metronome is disabled.

CPR Data Displayed

This parameter allows you to select the format for CPR feedback. If set to R/D Indicators, the unit displays an R if the rate of compression is below an acceptable level and a D if the depth of compressions is below an acceptable level. If set to Rate Only, the unit displays the average compression rate.

“CHECK PATIENT” Prompt

Changes the display message and the voice prompt issued when a shockable rhythm has been detected by background ECG analysis and Heart Rate Alarms are enabled, or the unit is operating in Semi-Automatic mode.

Display ECG in Semi-Auto Mode

Sets the unit to display or not display the patient’s ECG trace on the monitor while in semiautomatic mode.

Store to Card in Auto Monitor Mode (AED models)

Sets the unit to store patient’s ECG trace and voice data automatically to the PCMCIA card when:

- ECG leads are attached to the patient
- MFE pads are not connected
- M Series unit is on

If disabled, the M Series unit will not record any data to the PCMCIA card unless MFE pads are connected to the patient.

Auto Charge in Advisory Mode

When enabled and a shockable rhythm is detected after pressing the **ANALYZE** button, the unit will automatically charge the defibrillator to the pre-configured or user selected energy setting.

Enable Voice In Advisory Mode

Enables or disables voice prompts when operating in Advisory or Manual operating modes. If enabled, the voice prompts will sound at the appropriate time when in Advisory mode or Manual mode.

ECG Waveform to Card in Advisory Mode

Sets the unit to record the ECG waveform continuously to the PCMCIA card while in advisory mode.

Audio Data Recording to Card in Advisory Mode

Sets the unit to record audio data continuously to the PCMCIA card while in advisory mode.

Note: Audio recording is temporarily suspended during CPR monitoring.

Display Heart Rate in Semi-Auto Mode

Sets the unit to display the patient heart rate on the monitor while in semiautomatic mode.

Display Lead on Power-Up

Allows the user to select any one of the following Leads to be displayed on power-up: Paddles/ Pads, I, II, or III. When the unit powers up in semi-automatic mode, the option is ignored. The unit will power up in Lead II, and switch leads automatically between leads II and MFE for Auto Monitor and Auto Defib modes, respectively. When the unit enters Manual Mode (Manual Mode override sequence is completed), the lead switches to the setting specified in the “Display Lead on Power Up” option.

Frequency Response

Selects the ECG filter bandwidth to be used during ECG monitoring. The frequency of the device can be set to either help reduce noise, help with the diagnostic response, or set as a default response.

Enable 12-Lead in Semi-Auto Mode (AED with 12-Lead)

If set to “Yes,” 12-lead analyses, transmissions and print-outs are available in semi-automatic (AED) Auto Monitor mode (ECG leads on the patient with MFE Pads disconnected), depending on other configuration option settings. If set to “No,” 12-lead functions are available in Manual Mode only.

QRS Volume on Power-Up

Turns the default QRS beeper volume to midrange or off following power up of the unit.

If set to “Off in Semi-Auto Mode,” the QRS beeper volume turns off in semi-auto mode. If the unit is changed to manual mode, the beeper volume sets to midrange.

Pace Rate Setting on Power-Up

Sets the default pace rate of the M Series unit on power-up, between 30 ppm and 102 ppm (increments of 4 ppm).

Enable Pacer Detection

Allows you to specify whether the unit should detect pacemaker signals from a patient with an implantable pacemaker and indicate those signals on the display. When set to Yes, a pacemaker marker is displayed on the ECG trace whenever the unit detects implanted pacer stimuli.

You can override this setting during normal operations. This parameter simply indicates the default setting at power-on.

Gain On Power-Up

Sets the default **SIZE** of the displayed ECG signal (AGC, 0.5 cm/mV, 1 cm/mV, 1.5 cm/mV, and 2 cm/mV) when the device is powered-up.

Retain SYNC after Defib

Sets the unit to remain in SYNC mode after a synchronized cardioversion shock. The unit will remain in SYNC mode until the **SYNC** button is pressed again or the unit is switched out of Defib mode.

Auto Generate Strips

Sets the strip chart recorder to automatically begin printing after a defibrillator discharge or whenever alarms are triggered while in manual mode. (Unit must be equipped with the optional strip chart recorder feature.)

Print 3 Leads When Leads Sel

When enabled, the strip chart recorder will automatically print three (3) simultaneous leads of the patient ECG when Leads are selected and a five (5) lead or 12-lead ECG cable is in use.

Note: This option is temporarily suspended during CPR monitoring.

Report Memory Card Errors

Allows the user to disable memory card error messages and voice prompts.

If this option is set to “No”, the unit suppresses all error messages (i.e., “INSERT CARD”, “REPLACE CARD”, “CARD FULL”, and “CARD LOW < *n* MINUTES”) related to the use of the memory card.

Auto Analyze on Power Up (AED Semi-Automatic Mode)

When set to “Yes”, the unit will automatically begin an ECG rhythm analysis as soon as the device is turned on and pads are properly connected. An “ANALYZING ECG” message will be displayed for 5 seconds and a “STAND CLEAR” message is displayed and announced indicating the start of the analysis. If the Auto Analyze option is enabled, the analysis will be the first of a stacked shock sequence.

Note: The unit must be turned off for 10 seconds or more for the analysis to auto -start when the device is turned on.

Extra CPR Interval Before 1st Analysis

This parameter pertains only to Auto Defib mode in AED units.

When this parameter is set to No (default), and the unit detects a pad connection upon power-on, it displays the “PRESS ANALYZE” prompt. If the unit is powered on with no pads connected, the unit displays the “ATTACH PADS” prompt until pads are connected. Once pads are connected, the “PRESS ANALYZE” prompt is displayed.

When this parameter is set to Yes, the unit displays alternating prompts “CHECK PULSE” and “IF NO PULSE, PERFORM CPR” for the configured Extra CPR Interval at power-on. At the end of the CPR period, if the unit does not detect a pads connection, it displays the prompt “ATTACH PADS” until pads are connected. If a pads connection is detected, and the system is configured to Auto Analyze On Power Up, the unit automatically starts an ECG analysis. If the

unit is not configured to Auto Analyze On Power Up, it displays the prompt “PRESS ANALYZE.” You can start an ECG analysis during the CPR interval by pressing the **Analyze** button.

Duration of Extra CPR Interval

This parameter allows you to specify the duration of the extra CPR interval (see previous entry). It has no effect if “Extra CPR Interval Before 1st Analysis” is set to “No.”

Auto Transmit After 12 Lead

When enabled, the unit will automatically enter the transmission setup screen following completion of a 12-lead analysis.

To fax using 2x6 format, this must be set to “Yes.”

Fax/Communication Phone Numbers

Allows the user to pre-configure up to 24 locations and phone numbers and delete obsolete phone numbers. The M Series uses the phone numbers to transmit data to a fax machine or Catalyst MUSE system following 12-lead analysis.

If you are transmitting to a Catalyst MUSE system, you can configure multiple phone numbers to access the same system. This will enable you to quickly try alternate numbers if you encounter difficulty transmitting to the Catalyst MUSE system. The system administrator provides these numbers when you initially set up access to the system. See Appendix B of the 12-Lead ECG Monitoring insert (part number 9650-0215-01) for more information.

You must also configure the Catalyst MUSE site and location identifiers before you can transmit to a Catalyst MUSE system. See the “MUSE Site and Location” section of this guide.

It is also recommended that you set up the M Series device identifier. See “Device Identifier” on page 8 for more information.

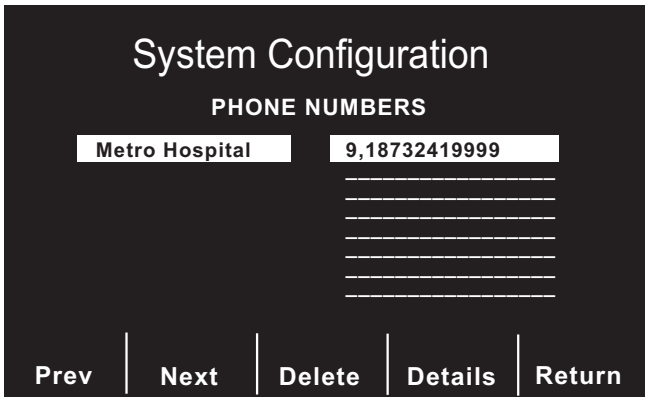
Updating Fax/Communication Information

To transmit data to a fax machine or a Catalyst MUSE system, you must configure the following:

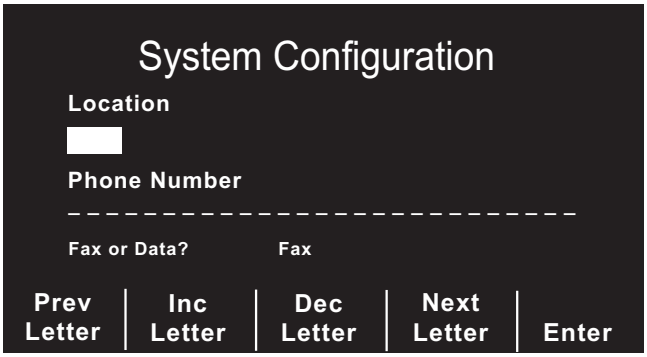
- location of the medical facility to which data will be transmitted
- phone number to which data will be transmitted
- type of data to be transmitted (“Fax” if transmitting to a fax machine; “Data” if transmitting to Catalyst MUSE)

To update fax/MUSE communications phone numbers:

1. From the main System Configuration menu, press the **Next Item** softkey until “FAX/ COMMUNICATION PHONE NUMBERS” highlights.
2. Press **Change Value** softkey. The Phone Numbers menu displays:



3. Press **Next** or **Prev** softkey until either:
   - The phone number to be changed highlights
   - An empty line highlights (if adding a new phone number)
4. Press **Details** softkey to select field. The Location and Phone Number menu displays:



To update location of medical facility:

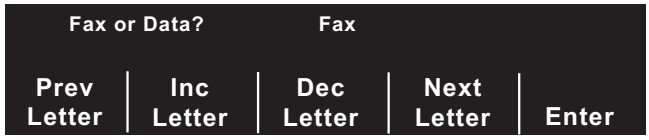
1. Press **Prev Letter** or **Next Letter** softkey to select letter.
2. Press **Inc Letter** or **Dec Letter** softkey to change value of letter.
   Repeat steps 1 and 2 until location has been entered.
3. Press **Enter** softkey to move cursor to first digit of phone number.

To update phone number:

1. Press **Prev Letter** or **Next Letter** softkey to select digit.
2. Press **Inc Letter** or **Dec Letter** softkey to change value of digit.
   Repeat steps 1 and 2 until entire phone number has been entered.
3. Press **Enter** softkey to move cursor to “Fax or Data?” field.

To specify type of phone number:

1. Press **Inc Letter** softkey to toggle between “Fax” and “Data.” Select “Fax” to transmit to a fax machine.



Select “Data” to transmit to a Catalyst MUSE system.

2. Press **Enter** softkey.

Deleting Fax/Communication Information

The following procedure deletes obsolete phone numbers from your M Series unit.

To delete phone numbers:

1. From the main System Configuration menu, press **Next Item** softkey until “FAX/ COMMUNICATION PHONE NUMBERS” highlights.
2. Press **Change Value** softkey.

The Phone Numbers menu displays.

3. Press **Next** or **Prev** softkey to scroll to phone number.
4. Press **Delete** softkey to delete phone number.

12 Lead Analysis

This setting cannot be changed in the current version of software.

12 Lead Printout

When set to “Standard” the 12-lead 4x3 printout will use the standard lead format.

When set to “Cabrera” the 12-lead 4x3 printout will use the Cabrera-style lead format.

Print 12 Lead Measurements

When set to “Yes” the 12SL™ Analysis will produce and print a measurements matrix including measurements for each lead. Global measurements will be produced and printed regardless of this setting. This setting affects the strip chart and summary report printouts as well as the fax transmission. When set to “Yes” any faxed 12-lead report will contain two pages. The second page of the report will contain the computed measurements matrix.

12 Lead Fax Format

When set to “4x3 Standard” the 12-lead format on the fax output is identical to the format on the strip chart, with the addition of a 10-second Lead II rhythm strip. (If the 12 LEAD PRINTOUT configuration option is set to “Cabrera” the fax will be Cabrera as well.)

When set to “2x6” the 12-lead format on the fax output will be configured for two columns of 6 leads, each with 5 seconds of data. The fax will not contain the 12SL interpretative statements or the 10-second Lead II rhythm strip. In addition, you must set “Auto Transmit After 12 Lead Analysis” to “Yes.”

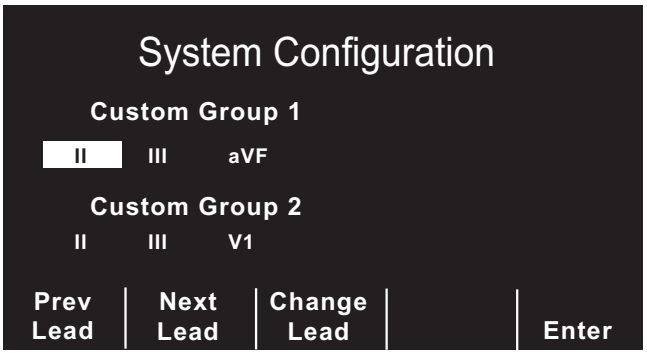
The setting “4x3 Median Compl” is supported in software versions higher than 17.00. If “4x3 Median Compl” is selected, the 12-lead ECG waveforms on the strip chart, summary report, and fax will contain a single median complex beat computed by the GE Medical Systems Information Technologies 12SL analysis program.

Print 2 Copies 12 Lead

When set to “Yes”, two copies of the 12-lead 4x3 report and 12SL analysis will print on the strip chart. This setting only affects 12-lead reports generated by pressing the **Acquire** softkey.

Set Lead Groups

This setting allows the user to configure two custom lead groups as described in the 12-Lead ECG Monitoring insert (part number 9650-0215-01). Pressing the **Change Value** softkey will cause the following screen to appear:



Pressing the **Prev Lead** softkey will select the previous lead.

Pressing the **Next Lead** softkey will select the next lead.

Pressing the **Change Lead** softkey will change the selected lead. Repeatedly pressing this key will cycle the selected lead through all twelve possibilities.

Pressing the **Enter** softkey will return to main configuration menu.

12 Lead Freq Response

When set to “0.05-150 Hz 4x3” the 12-Lead Filter Setting defaults to 0.05-150 Hz 4x3.

When set to “0.05-150 Hz Cont.” the 12-Lead Filter Setting defaults to 0.05-150 Hz Cont.

When set to “0.05-40 Hz 4x3” the 12-Lead Filter Setting defaults to 0.05-40 Hz 4x3.

Refer to the *12- Lead ECG Monitoring Operator’s Guide* insert (part number 9650-0215-01) for details on each setting.

Lead Group Default

When set to “Standard” the 12-Lead Group Setting defaults to Standard.

When set to “Custom Group 1” the 12-Lead Group Setting defaults to the setting defined under Custom Group 1.

When set to “Custom Group 2” the 12-Lead Group Setting defaults to the setting defined under Custom Group 2.

Refer to the *12- Lead ECG Monitoring Operator’s Guide* insert (part number 9650-0215-01) for details on each setting.

Print 12 Lead Interpretation

When set to “Yes” the 12SL interpretative statements will print following the acquisition of a 12-lead ECG. This setting affects the strip chart and summary report printouts as well as the fax transmission.

Defib Default to Pads

When set to “Yes” switching the unit to DEFIB mode will set the active lead to Pads/Paddles regardless of the configuration setting for “Display Lead on Power-Up.”

Cell Phone Type

This setting controls the active cellular phone profile for PCMCIA modem cards. It has no effect on landline functionality. Pressing the **Change Value** softkey selects different phone makes.

Select the phone make corresponding to your target cellular phone. For additional information on cellular phone compatibility contact The Supply Net, Inc. at www.thesupplynet.com or (800) 826-0279.

$EtCO_2$ Options

Pressing **Set/Review** causes a submenu to display, which allows review of or changes to the following capnography options:

- Default EtCO2 Units: Sets $EtCO_2$ units to mmHg, kPa, or %
- Displayed Zoom Level: Sets the default scale setting for the displayed capnographic waveform in the $EtCO_2$ units selected above. Does not affect the printed waveform or the waveform data stored on the data card.
- Default EtCO2 Comp Setting: Sets the default compensation for CO_2 to None, O_2, N_2O, or O_2+N_2O.
- EtCO2 Average on Power Up Sets the time period over which the $EtCO_2$ values are averaged to: 1 breath, 10 seconds (default), or 20 seconds.

Enable Leads Off

When set to “Yes” and ECG leads do not have proper contact with the patient or the cable is not properly attached to the M Series unit, the ECG LEADS OFF message displays and a dashed line displays in place of the ECG waveform. Yes is the default setting.

When set to “No” and ECG leads do not have proper contact with the patient or the cable is not properly attached to the M Series unit, the POOR LEAD CONTACT message and the ECG waveform display.

Caution: Use care when interpreting ECG waveforms when the POOR LEAD CONTACT message displays, because the ECG waveform may include a significant amount of artifact. Whenever possible, reattach the leads before interpreting the waveform.

Note: When using 12 Lead or Pacer mode, the M Series unit functions as if this configuration were set to “Yes.”

NIBP Units

Sets the NIBP unit of measurement to mmHg or kPa.

NIBP Auto Interval Default

Sets the default for the amount of time between automatic measurements.

Trigger NIBP Meas on BP Alarm

When set to “Yes,” the M Series unit initiates a single additional blood pressure measurement when any of the NIBP alarms trigger.

Trigger NIBP Meas on HR Alarm

When set to “Yes,” the M Series unit initiates a single blood pressure measurement when heart rate/pulse rate alarm triggers.

NIBP First Inflate Pressure Default

Sets the default NIBP cuff inflation pressure (the pressure up to which the NIBP cuff inflates at the beginning of each measurement).

Basic Auto Energy Escalation

When set to Yes, the unit automatically increments the defibrillation energy to the levels specified in Energy Level: Shock 1, 2, 3 after each of the first two shocks and displays the message “ENERGY INCREMENTED,” when both of the following are true:

- The defibrillator is in Manual mode
- The defibrillator has external paddles or pads attached

Manually changing the energy level outside the pre-programmed sequence and delivering a shock disables this function until the unit is turned off for more than 10 seconds, then turned back on.

This option increments the energy level regardless of Shock Advisory activation or status. It does not work with internal handles.

For more information about the energy level settings, see the “Energy Level: Shock 1, 2, 3” section of this manual.

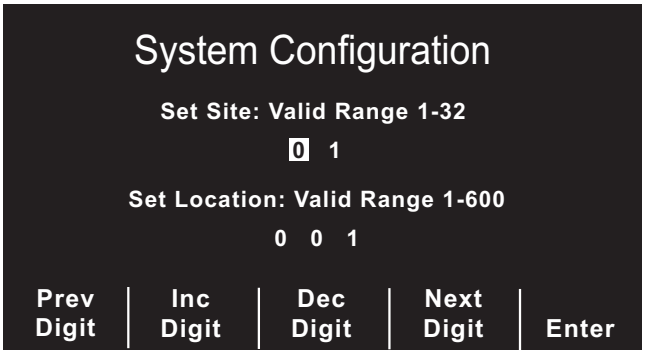
MUSE Site and Location

Sets the Catalyst MUSE site and location identifiers needed to transmit 12-lead ECG data to a Catalyst MUSE system. The medical facility's Catalyst MUSE system administrator provides these numbers when you initially set up access to the system. The Catalyst MUSE site has a value between 01 and 32, and the location has a value between 001 and 600.

Note: You must also configure the Catalyst MUSE communications phone number. See the "Fax/Communication Phone Numbers" section of this guide.

To set the Catalyst MUSE site and location:

1. From the main System Configuration menu, press **Next Item** softkey until "MUSE SITE AND LOCATION" highlights.



2. Press the **Change Value** softkey to display the MUSE Site and Location menu:
3. Press **Prev Digit** or **Next Digit** softkey to select digit and move to previous or next digit.
4. Press **Inc Digit** or **Dec Digit** softkey to change value of digit.

   Repeat steps 3 and 4 until site has been entered.
5. Press **Enter** softkey to move cursor to first digit of location.

   Repeat steps 3 and 4 until location has been entered.
6. Press **Enter** softkey to accept site and location values and return to main configuration menu.

12 Lead Secs Per Lead

Sets the number of seconds of ECG data printed for each lead on the 12-lead 4x3 strip. This setting only affects 12-lead reports generated by pressing the **Acquire** softkey.

12 Lead Print Speed

Sets the print speed of the 12-lead 4x3 reports to either 25mm/second or 50mm/second. This setting only affects 12-lead reports generated by pressing the **Acquire** softkey.

Upload Baud Rate

Sets the upload transmission rate to 9600 bps, 38400 bps, or 115200 bps. This option is only applicable to units equipped with Bluetooth or RS-232 communications hardware.

Trending Report Zoom Level

Sets the power up resolution for the displayed trend report. Trend data values for all physiological parameters are simultaneously sampled by the M Series and stored in memory once each minute.

When displaying this data in tabular format on the M Series screen, however, the user can choose to view all or only a subset of the stored trend data. The factory default zoom level causes all one-minute data samples to be displayed when viewing the trend table. If lower resolution is desired, this configuration option can be set to display only the samples taken every 5, 10, 15, 30, or 60 minutes. All data samples are printed on the strip chart regardless of this setting.

Trending Enabled

When set to “Yes”, the M Series unit will print and display trend reports as long as the appropriate hardware is installed. Defaults to “No” for units not equipped with the appropriate hardware.

AED Defib Ready Hold Time (AED Semi-Automatic Mode)

Sets the number of seconds the unit sounds a charge ready tone, indicating that the defibrillator is charged and ready to use. The charge ready tone stops when you discharge the defibrillator or when the hold time for the charge ready tone has elapsed. You can set the hold time for the charge ready tone to 15 seconds or 60 seconds. The default is 15 seconds.

Battery Type Used

Allows the user to select between the PD 4410 battery (default) and the newer XL battery. To maximize battery life, it is important that the setting reflect the actual battery in use. Each battery type has a different threshold for “low battery” and “shutdown”, and has a different Amp-hour rating.

WARNINGS:

If an XL battery is installed in an M Series, the user must ensure that the “BATTERY TYPE USED” is set to “XL Battery.” Otherwise, the M Series may abnormally terminate battery charging prior to completion when charging a depleted or nearly depleted XL battery. If battery charging is abnormally terminated, the M Series battery will toggle the “CHARGER ON” light between amber and green, and, when M Series power is applied, it will display the message “BATT. OVERCHARGE” on the screen for approximately 30 seconds.

Note that if battery charging is abnormally terminated because the “BATTERY TYPE USED” has been incorrectly set to “PD 4410”, the XL battery can still be charged to completion by cycling M Series power from “off” to “on” and then back to “off” to clear this condition.

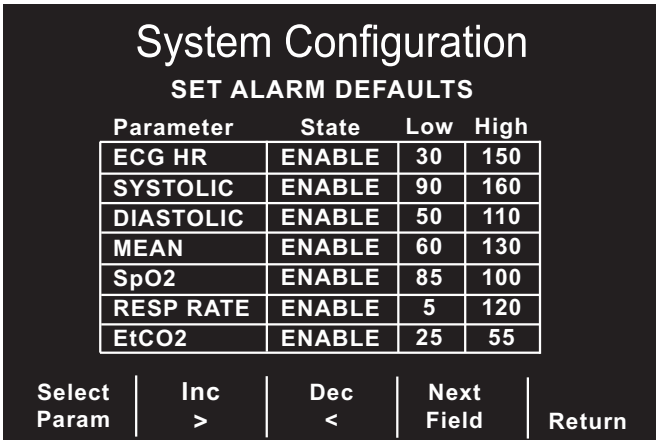
Incorrectly setting “BATTERY TYPE USED” to “PD 4410” when an XL battery is installed will cause the “LOW BATTERY” warning message to be displayed on the M Series screen prematurely.

Incorrectly setting the selection to “XL battery” when a PD 4410 battery is installed will inappropriately delay issuance of the “LOW BATTERY” warning and severely limit the number of defibrillation shocks which can be delivered between the onset of the “LOW BATTERY” warning message and the M Series shutdown.

Alarm Limits at Power Up

Allows review of, or changes to, the power-up default alarm state and alarm limits for each physiological parameter installed in the unit.

With Alarm Limits At Power Up highlighted and Set/Review selected, press the **Change Value** softkey. The following screen displays:



Pressing the **Select Param** softkey will scroll the highlight through the available parameters.

Pressing the **Inc** or **Dec** softkeys increments or decrements the value in the highlighted field.

Pressing the **Next Field** softkey moves the highlight to the next field in the table.

Pressing the **Return** softkey selects the values that have been entered and returns to the main configuration menu.

Alarms Active at Power Up

When set to “Yes”, alarms are automatically active, or “armed”, at power up. The setting applies to all alarms enabled by the Alarm Limits At Power Up option.

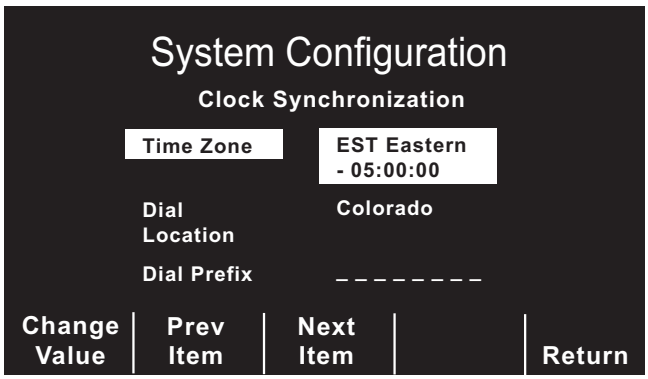
Low Battery Tone

Sets the interval between Low Battery warning beeps to either 1 minute or 5 minutes. The Low Battery warning message is displayed once per minute, regardless of this setting.

Clock Synchronization

Allows the user to set clock synchronization parameters on the M Series unit.

Highlight the Clock Synchronization option and press the **Change Value** softkey to display the following screen:



Press the **Change Value** softkey to scroll through the available values for each parameter.

Press the **Next Item** softkey to move to the next parameter in the table.

Press the Return softkey to save the values entered and return to the main configuration menu.

You can set the values for the following Clock Synchronization options:

- Time Zone: Selects the time zone in which the M Series will be used. Choices include: Azores, Middle Atlantic, S. America Eastern, AST Atlantic, EST Eastern, CST Central, MST Mountain, PST Pacific, AKST Alaska, HST Hawaiian, Samoa, Dateline, GMT Greenwich, CET Central Europe, EET Eastern Europe, MSK Moscow, Arabian, Afghanistan, West Asia, Central Asia, Southeast Asia, AWST Australian West, Korean, ACST Australian Cent, AEST Australian East, Central Pacific, or New Zealand
- Dial Location: Sets the National Institute of Science and Technology (NIST) dialing location to either Hawaii or Colorado. This is the location called by the M Series to obtain accurate time information for setting its internal clock.
- Prefix: Affixes up to eight user selectable digits or special characters (+, &, !, *, or comma) to the start of the dialing location phone number.

Daylight Savings

When set to “Yes” and the user dials the selected NIST location, the unit will automatically adjust the time for Daylight Savings based on the assumption that in North America Daylight Savings Time starts on the second Sunday of March at 1:59:59 AM (setting the time ahead by one hour) and ends on the first Sunday of November at 1:59:59 AM (setting the time back by one hour).

To enable this option, you must select a time zone within North America (for example, EST, CST, MST, PST, or AKST). Otherwise, the unit disables the Daylight Savings option.

Card Capacity Message Enabled

When set to “Yes” and data recording is enabled with a data card present, the M Series will display “CARD LOW” messages when the remaining storage capacity of the card reaches 30, 15, and 5 minutes.

To enable this option, the “Report Memory Card Errors” option must be set to “Yes”; otherwise, the option is ignored.

Erase Card Prompt at Pwr Off

Sets the M Series unit to allow the user to erase the data card at power-off if the card contains only self test, and optionally, synchronized cardioversion data. To enable this option, the “Allow Card Erase” option must be set to “Yes”.

If set to “Yes”, the unit will display the message “Erase Card -- Yes/No?” when the user turns the Selector Switch to the OFF position and the following criteria are met:

1. A data card is installed in the M Series unit.
2. The unit has NOT performed a defibrillation, other than a self test, since power-up.

   Note: The M Series unit can also be configured to display the “Erase Card -- Yes/No?” prompt if the card contains only synchronized cardioversion data. See the “Sync Defib Excluded” option for more information.
3. The unit has NOT delivered a pacing current greater than 25 mA since power-up.

If the user selects “Yes” at the prompt within 15 seconds, the card will be erased and the unit will subsequently shut off. If the user selects “No”, or 15 seconds is exceeded without a response, the unit will shut off without erasing the card.

Remove Card Prompt at Pwr Off

Sets the M Series unit to prompt the user to remove the data card at power-off if the card contains any information other than self test, and optionally, synchronized cardioversion data.

If set to “Yes”, the unit will display the message “Remove Card” when the user turns the Selector Switch to the OFF position and the following criteria are met:

1. A data card is installed in the M Series unit.
2. The unit HAS performed a defibrillation, other than a self test, since power-up.

   Note: The M Series unit can be configured NOT to display the “Remove Card” prompt if the card contains only synchronized cardioversion data. See the “Sync Defib Excluded” option for more information.
3. The unit HAS delivered a pacing current greater than 25 mA since power-up.

When this option is enabled, the “Remove Card” message will be displayed for 10 seconds, then the M Series unit will shut off.

Sync Defib Excluded

Allows the exclusion of synchronized cardioversion from the criterion of a defibrillation event, for the purposes of the “Erase Card Prompt at Pwr Off” and “Remove Card Prompt at Pwr Off” configuration settings.

When set to “Yes”, if the M Series unit has only discharged self test or synchronized cardioversion defibrillations and has not delivered pacing current greater than 25 mA, the unit displays the “Erase Card -- Yes/No” prompt at power-off (if so configured). Otherwise, the unit displays the “Remove Card” prompt at power-off (if so configured).

PTCA Settings

Allows review of, or changes to Percutaneous Transluminal Coronary Angioplasty (PTCA) settings if the M Series includes the 12-Lead Reperfusion Algorithm option.

With PTCA Settings highlighted and Set/Review selected, press the **Change Value** softkey to set the following parameters:

- Message Enabled: Determines whether or not the M Series unit prints a PTCA message (if appropriate).
- Threshold: Sets the threshold, in mV, for issuing the PTCA message. Only available if the Message Enabled option is set to “Yes”.

Enable Data Relay

Sets the M Series unit to include “DATA RELAY” in the pre-configured locations on the 12 Lead transmission setup screen. To enable this option, the “Auto Transmit After 12 Lead” option must be set to “Yes”; otherwise, this option is ignored.

Configuration Option Tables

The following tables list the M Series option and their possible values.

An asterisk (“*”) refers to features that are currently not implemented on the M Series products. These features will only operate in accordance with their pre-configured default settings (listed below).

General

Feature	Options	Default
Selected Language	English, Other	English
Notch Filter (ECG)	50, 60 Hz	60 Hz
Allow Card Erase	Yes/No	Yes
Display Elapsed Time	Yes/No	AED: Yes Manual Advisory: No
* Voice Markers Enabled	Yes/No	No
Set Report Restart Delays	Set/Review	Set/Review
Summary Report Restart Delay	5, 15, 30, 90 minutes, 1.5 days	15 minutes
Trend Report Restart Delay	5, 15, 30, 90 minutes, 1.5 days	15 minutes
Print 12 Lead 4x3	None, 1 Copy, 2 Copies	None
* Auto Self-Test TIme-out Period	No Test, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 days	No test
Async Softkey in Pace Mode	Yes/No	Yes
Code Markers (Defib Code Markers, Monitor Code Markers, Pace Code Markers)	Config/Review	Config/Review
Device Identifier	0 through 9, A through Z, blank, and “_” inclusive for each digit	0 0 0 0 0 0 0 0 0 0 0
Manual Mode Passcode	0 through 3 inclusive, for each digit	0 0 0
Configuration Mode Passcode	0 through 3 inclusive, for each digit	0 0 0 0 0 0 0 0
Display Lead on Power-Up	Paddles/Pads, I, II, or III	Paddles/Pads
Frequency Response	0.5 - 21 Hz, 0.5 - 27 Hz, 1 - 21 Hz	0.5 - 21 Hz
QRS Volume on Power-Up	Midrange, OFF	Midrange
Pace Rate Setting on Power-Up	30 through 102 ppm (increments of 4 ppm)	70 ppm
Enable Pacer Detection	Yes/No	Yes
Gain on Power-Up (ECG)	AGC, 0.5 cm/mV, 1 cm/mV, 1.5 cm/mV, 2 cm/mV	AGC
Report Memory Card Errors	Yes/No	Yes
Enable Leads Off	Yes/No	Yes
Upload Baud Rate	9600 bps, 38400 bps, 115200 bps	38400 bps
Trending Report Zoom Level	All, 5 min., 10 min., 15 min., 30 min., 60 min.	All
Trending Enabled	Yes/No	Yes
Battery Type Used	PD 4410, XL Battery	PD 4410
Alarm Limits at Power-Up	Set/Review	Set/Review
Alarms Active at Power-Up	Yes/No	No
Low Battery Tone	1, 5 minutes	1 minute
Clock Synchronization	Set/Review	Set/Review

Feature	Options	Default
Time Zone	Azores, Middle Atlantic, S. America Eastern, AST Atlantic, EST Eastern, CST Central, MST Mountain, PST Pacific, AKST Alaska, HST Hawaiian, Samoa, Dateline, GMT Greenwich, CET Central Europe, EET Eastern Europe, MSK Moscow, Arabian, Afghanistan, West Asia, Central Asia, Southeast Asia, AWST Australian West, Korean, ACST Australian Cent, AEST Australian East, Central Pacific, New Zealand	EST Eastern
Dial Location	Hawaii, Colorado	Colorado
Dial Prefix	8 digits	(none)
Daylight Savings	Yes/No	No
Card Capacity Message Enabled	Yes/No	No
Erase Card Prompt at Pwr Off	Yes/No	No
Remove Card Prompt at Pwr Off	Yes/No	No
Sync Defib Excluded	Yes/No	No

Advisory and Semi-Automatic Modes

Feature	Options	Default
Energy Level: Shock 1	Damped Sine Wave (DSW): 1-10, 15, 20, 30, 50, 75, 100, 150, 200, 300, 360 J Biphasic: 1-10, 15, 20, 30, 50, 75, 100, 120, 150, 200 J	Manual DSW: 200 J Manual Biphasic: 120 J AED DSW: 200 J AED Biphasic: 120 J
Energy Level: Shock 2	Damped Sine Wave (DSW): 1-10, 15, 20, 30, 50, 75, 100, 150, 200, 300, 360 J Biphasic: 1-10, 15, 20, 30, 50, 75, 100, 120, 150, 200 J	Manual DSW: 300 J Manual Biphasic: 150 J AED DSW: 200 J AED Biphasic: 120 J
Energy Level: Shock 3	Damped Sine Wave (DSW): 1-10, 15, 20, 30, 50, 75, 100, 150, 200, 300, 360 J Biphasic: 1-10, 15, 20, 30, 50, 75, 100, 120, 150, 200 J	Manual DSW: 360 J Manual Biphasic: 200 J AED DSW: 360 J AED Biphasic: 200 J
Auto Analyze	Yes, No, Only in Semi-Auto	Manual: No AED: Only in Semi-Auto
Stacked Shocks	1, 3	3
Display “DO CPR” Message	Yes, No, Only in Semi-Auto	Manual: No AED: Only in Semi-Auto
CPR Message After Shock	“IF NO PULSE, PERFORM CPR;” “PERFORM CPR”	“IF NO PULSE, PERFORM CPR”
CPR Message After No Shock Advised	“IF NO PULSE, PERFORM CPR;” “PERFORM CPR”	“IF NO PULSE, PERFORM CPR”
Duration of CPR Interval	1, 1.5, 2, 2.5, 3, 3.5 or 4 minutes	1 minute
Record CPR Compression Data	Yes, No	No
CPR Compression Metronome	Yes, Semi-Auto Only, No	Semi-Auto Only
CPR Data Displayed	R/D Indicators, Rate Only	R/D Indicators
Check Pulse	Yes, No, After Shock Only, After No Shock Only	Yes
Restart Analysis After CPR	Yes, No	Yes
“CHECK PATIENT” Prompt	“CHECK PATIENT,” “PRESS ANALYZE”	“CHECK PATIENT”
Display ECG in Semi-Auto Mode	Yes/No	Yes
Store to Card in Auto Monitor Mode	Yes/No	Yes
Auto Charge in Advisory Mode	Yes/No	Yes
ECG Waveform to Card in Advisory Mode	Yes/No	No
Audio Data Recording to Card in Advisory mode	Yes/No	No
Enable Voice in Advisory Mode	Yes/No	No
Display Heart Rate in Semi-Auto Mode	Yes/No	No
Auto-Analyze on Power Up	Yes/No	No
Extra CPR Interval Before 1st Analysis	Yes/No	No
Duration of Extra CPR Interval	1, 1.5, 2, 2.5, 3, 3.5, or 4 minutes	1 minute
Enable 12-Lead in Semi-Auto Mode	Yes/No	Yes
AED Defib Ready Hold Time	15 seconds, 60 seconds	15 seconds

Manual Mode

Feature	Options	Default
Auto Generate Strips	Yes/No	Yes
Retain SYNC after Defib	Yes/No	No
Print 3 Leads When Leads Sel.	Yes/No	No
Auto Transmit After 12 Lead	Yes/No	No
Enable Data Relay	Yes/No	No
Fax/Communication Phone Numbers	Set/Review	Set/Review
12 Lead Analysis	Current 10 sec	Current 10 sec
12 Lead Printout	Standard/Cabrera	Standard
Print 12 Lead Measurements	Yes/No	No
12 Lead Fax Format	4x3 Standard, 4x3 Median Compl, 2x6	4x3 Standard
Print 2 Copies 12 Ld Analysis	Yes/No	No
Set Lead Groups	Set/Review	Set/Review
Custom Group 1 (3 leads) Custom Group 2 (3 leads)	For each lead: I, II, III, aVR, aVL, aVF, V1, V2, V3, V4,V5,V6	Custom Group 1: II III aVF Custom Group 2: II III V1
12 Lead Freq Response	0.05 - 150 Hz 4x3, 0.05 - 150 Hz Cont., 0.05 - 40 Hz 4x3	0.05 - 150 Hz 4x3
Lead Group Default	Standard, Custom Group 1, Custom Group 2	Standard
Print 12 Lead Interpretation	Yes/No	Yes
Defib Default to Pads	Yes/No	No
Cell Phone Type	Motorola, Nokia, NEC, OKI, Sony, Ericsson	Motorola
Basic Auto Energy Escalation	Yes/No	No
MUSE Site and Location	Site: 01 - 32 Location: 001 - 600	Site: 01 Location: 001
12 Lead Secs Per Lead	2.5, 5.0, 7.5, 10.0 seconds	2.5 seconds
12 Lead Print Speed	25 mm/sec, 50 mm/sec	25 mm/sec

$EtCO_2$ Option

Feature	Options	Default
$EtCO_2$ Options	Set/Review	Set/Review
Default $EtCO_2$ Units	mmHg, kPa, %	mmHg
Displayed Zoom Level	(in mmHg): 0-12.5, 0-25, 0-50, 0-75, 0-100 (in kPa): 0-1.7, 0-3.3, 0-6.6, 0-10.0, 0-13.3	0-50 mmHg 0-6.6 kPa
Default $EtCO_2$ Comp Setting	None, O2, N2O, O2 & N2O	None
$EtCO_2$ Average On Power Up	1 breath, 10 seconds, or 20 seconds	10 seconds

NIBP Option

Feature	Options	Default
NIBP Units	mmHg, kPa	mmHg
NIBP Auto Interval Default	2.5, 5, 10, 15, 20, 30, 45, 60, 90, 120 minutes	30 minutes
Trigger NIBP Meas on BP Alarm	Yes/No	Yes
Trigger NIBP Meas on HR Alarm	Yes/No	No
NIBP First Inflate Pressure Default	(in mmHg): 120, 140, 160, 180, 200, 220, 240, 260 (in kPa): 16.0, 18.7, 21.3, 24.0, 26.7, 29.3, 32.0, 34.7	160 mmHg

PTCA Settings Option

Feature	Options	Default
Message Enabled	Yes/No	Yes
Threshold	(in mV): 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 2.0	1.5 mV